



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/682,233 | 10/09/2003 | Xiaolan Ai | TIMK 8507U1 | 1025 |
| 1688 | 7590 | 09/07/2005 | EXAMINER | |
| POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615 | | | TRIEU, THERESA | |
| | | ART UNIT | | PAPER NUMBER |
| | | 3748 | | |
| DATE MAILED: 09/07/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

| | | | |
|------------------------------|---------------------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/682,233 | AI ET AL. | |
| | Examiner Theresa Trieu | Art Unit 3748 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 June 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6-8 and 12-21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 6,12,16,18 and 21 is/are rejected.
 7) Claim(s) 7,8,13-15,17,19,20 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the applicants' amendment filed on June 24, 2005.

Claims 6 and 7 have been amended. Claims 1-5 and 9-11 have been canceled. Claims 12-21 have been added. Overall, claims 6-8 and 12-21 are pending in this application.

The amendments and arguments presented by the applicant have been duly noted. In view of such, the previous rejections in the first Office Action have been withdrawn. However, an updated search and further review of the prior art of record, has prompted the new non-final rejections presented below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 6, 12, 16, 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Grant (Publication Number 3,320,828).

Regarding claims 6, 12, 16, 18 and 21, as shown in Figs. 1 and 2, Grant discloses an integrated speed reducer and gerotor pump assembly comprising: a motor (1) providing torque at an elevated speed; a speed reducer (not numbered; however, clearly seen in Fig. 1) configured for receiving torque at an elevated speed and increasing the torque to a reduce speed, a gerotor pump (16, 17) coupled with the speed reducer for receiving the torque at the reduce speed for pumping fluids; a housing (3) for hosting both the gerotor pump and the speed reducer; the speed reducer further comprising: a sun roller (6) having an input end coupled with the motor (1)

Art Unit: 3748

and having a first raceway; a planetary roller (7) having a second raceway; and an outer ring (5) having a third raceway eccentric to the first raceway. Note that in claims 6 and 12, the limitation "so that the second raceway.... b etween the sun roller and, the outer ring" is a functional implication. However, they are deemed not to impose any structural limitations distinguishable over the Grant device, which is certainly capable of performing as a speed reducer if so desired. In other words, the recitation of the functional implication of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Allowable Subject Matter

2. Claims 7, 8, 13-15, 17, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT
September 1, 2005


Theresa Trieu
Primary Examiner
Art Unit 3748